FIG. 1

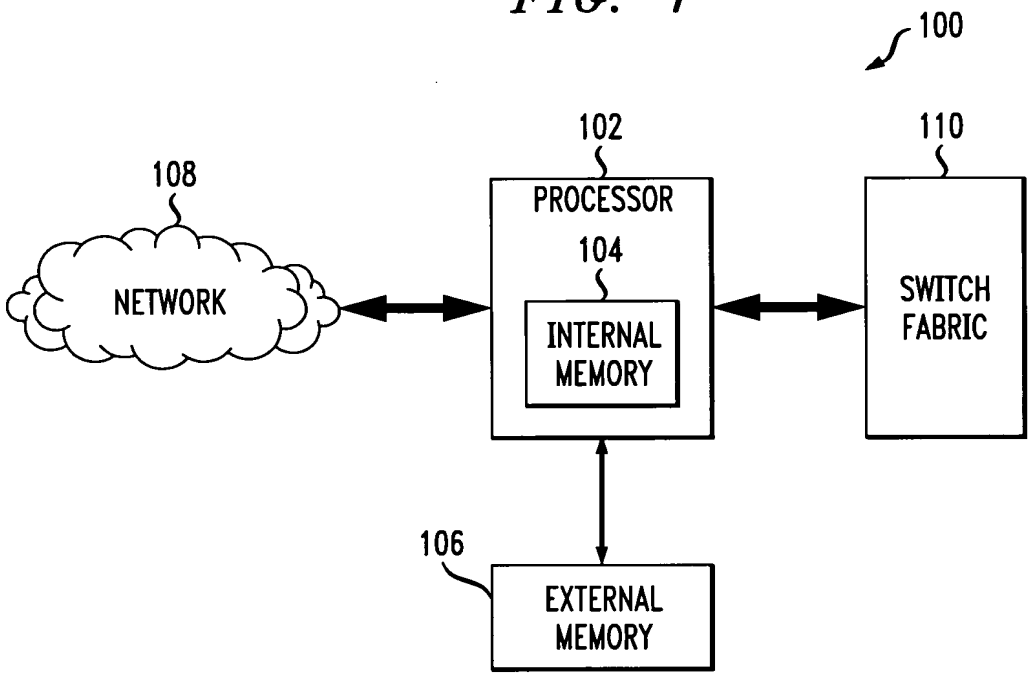

100
102
110
108
PROCESSOR
104
NETWORK
INTERNAL MEMORY
SWITCH FABRIC
106
EXTERNAL MEMORY

FIG. 2

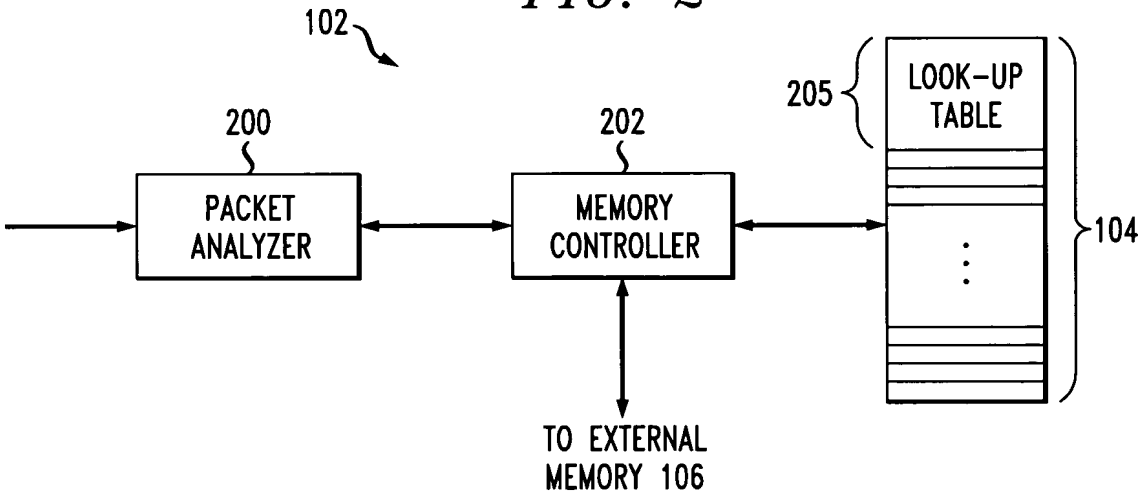

102
205
LOOK-UP TABLE
200
202
PACKET ANALYZER
MEMORY CONTROLLER
104
TO EXTERNAL MEMORY 106

FIG. 3A

205

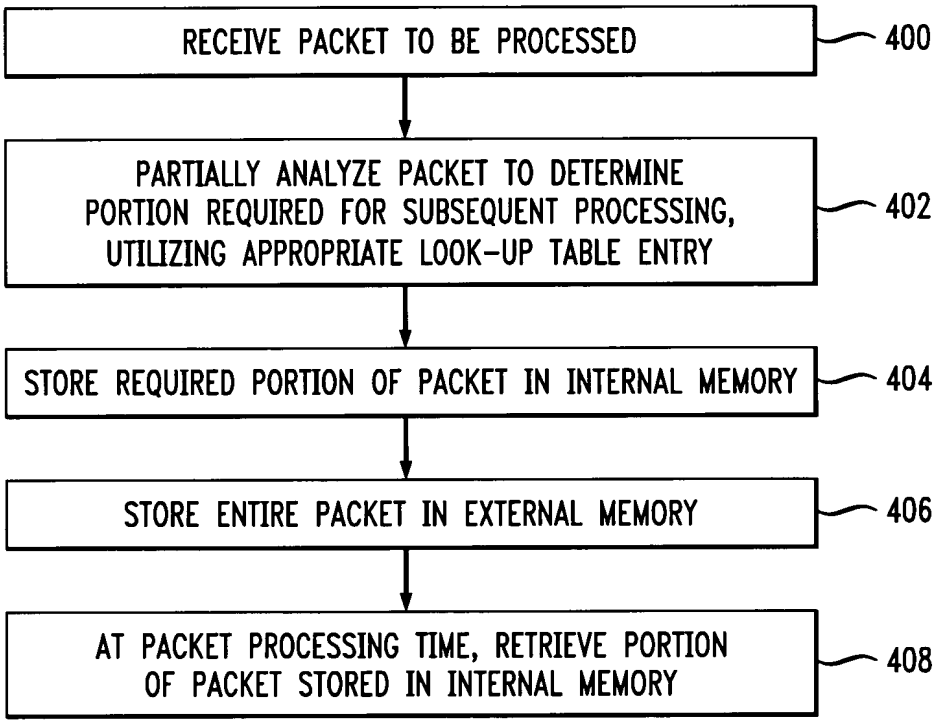
PORT 1	NUMBER OF BLOCKS
PORT 2	NUMBER OF BLOCKS
PORT 3	NUMBER OF BLOCKS
PORT 4	NUMBER OF BLOCKS
PORT 5	NUMBER OF BLOCKS
PORT 6	NUMBER OF BLOCKS
⋮	⋮
PORT N	NUMBER OF BLOCKS

FIG. 3B

205

PACKET FLOW 1	NUMBER OF BLOCKS
PACKET FLOW 2	NUMBER OF BLOCKS
PACKET FLOW 3	NUMBER OF BLOCKS
PACKET FLOW 4	NUMBER OF BLOCKS
PACKET FLOW 5	NUMBER OF BLOCKS
PACKET FLOW 6	NUMBER OF BLOCKS
⋮	⋮
PACKET FLOW N	NUMBER OF BLOCKS

FIG. 4


RECEIVE PACKET TO BE PROCESSED
400
PARTIALLY ANALYZE PACKET TO DETERMINE PORTION REQUIRED FOR SUBSEQUENT PROCESSING, UTILIZING APPROPRIATE LOOK-UP TABLE ENTRY
402
STORE REQUIRED PORTION OF PACKET IN INTERNAL MEMORY
404
STORE ENTIRE PACKET IN EXTERNAL MEMORY
406
AT PACKET PROCESSING TIME, RETRIEVE PORTION OF PACKET STORED IN INTERNAL MEMORY
408